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Taxidea taxus.

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Taxidea Waterhouse, 1838

Taxidea Waterhouse, 1838:154. Type species *Ursus labradorius* Gmelin, by original designation.

Taxus Say, 1823:369. Type species *Taxus labradorius*, by monotypy.

CONTEXT AND CONTENT. Order Carnivora, Family Mustelidae, Subfamily Taxidiinae (Long, 1965*b*). The genus includes one Recent species, *Taxidea taxus* (see below), and Pleistocene taxa, possibly species, named *mexicanus* Drescher, 1939, *sulcata* Cope, 1878, *robusta* Hay, 1921, and *papagoensis* Skinner, 1943.

Taxidea taxus (Schreber, 1778)

North American Badger

Ursus taxus Schreber, 1778:520, fig. 142B. Type locality "pays des Esquimaux" from Buffon, 1776:243–244.

Meles Taxus β americanus Boddaert, 1784:80. Type locality North America.

Ursus labradorius Gmelin, 1788:102. A renaming of *Ursus taxus* Schreber.

FIGURE 1. North American badger from Ibapah, Utah. In the southernmost subspecies, unlike the specimen shown, the dorsal whitish stripe extends to the base of the tail. Note the "badges" on the face, and the fossorial foreclaws. Photo by R. Porter.

Meles jeffersonii Harlan, 1825:309. Type locality "open plains of Columbia [River Valley], sometimes those of Missouri [Valley.]"

Taxidea berlandieri Baird, 1858:205. Type locality Llano Estacado, Texas, near boundary of New Mexico.

†*Taxidea marylandica* Gidley and Gaxin, 1933:352. Type locality Cumberland Cave, Allegany County, Maryland. Age Pleistocene.

CONTENT. Long (1972) recognized four Recent and one extinct Pleistocene subspecies as follows:

T. t. taxus (Schreber, 1778:520), see above (*americanus* Boddaert, 1784, *labradorius* Gmelin, 1788, *dacotensis* Schantz, 1946, *iowae* Schantz, 1947, *merriami* Schantz, 1950, and *kansensis* Schantz, 1950, are synonyms).

T. t. jeffersonii (Harlan, 1825:309), see above (*sulcata* Cope, 1878, *neglecta* Mearns, 1891, and *montana* Schantz, 1950, are synonyms, the last according to Long, 1964*b*:371, 1972, and Opinion 897 of the Internat. Comm. Zool. Nomenclature, 1970).

T. t. jacksoni Schantz, 1945:431. Type locality 4 mi. E Milton, Rock Co., Wisconsin.

T. t. berlandieri Baird, 1858:205, see above (*labradoria* Waterhouse, 1838—see Baird, 1858:201, not *Ursus Meles labradorius* Gmelin, 1788, *californica* Gray, 1865, *infusca* Thomas, 1898, *phippsi* Figgins, 1918, *robusta* Hay, 1921, *sonoriensis* Goldman, 1939, *papagoensis* Skinner, 1943, *apache* Schantz, 1948, *littoralis* Schantz, 1949, *hallorani* Schantz, 1949, and *nevadensis* Schantz, 1949, the last renamed *halli* Schantz, 1951, are synonyms).

T. t. marylandica Gidley and Gazin, 1933 (see Long, 1964*a*). Type locality Cumberland Cave, Maryland, Pleistocene. Regarded as a distinct species by the authors, and as inseparable from *T. t. taxus* by Hall (1944).

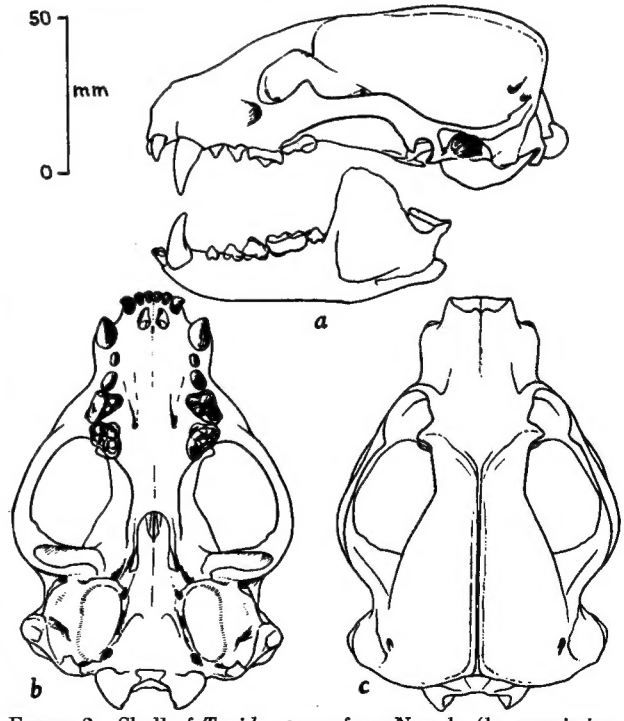

FIGURE 2. Skull of *Taxidea taxus* from Nevada (by permission of Professor E. Raymond Hall, from Hall, 1946:215). Lateral view of skull and lower jaw (a), ventral view (b), and dorsal view (c).

FIGURE 3. Skulls of the four Recent subspecies of *Taxidea taxus*. From top to bottom these are: *T. t. jeffersonii*, male from Dillon, Montana; *T. t. taxus*, male from Carmen, Manitoba; *T. t. jacksoni*, male from Mamie Lake, Wisconsin; *T. t. berlandieri*, male from San Luis Mountains, Chihuahua. All skulls in U. S. National Museum.

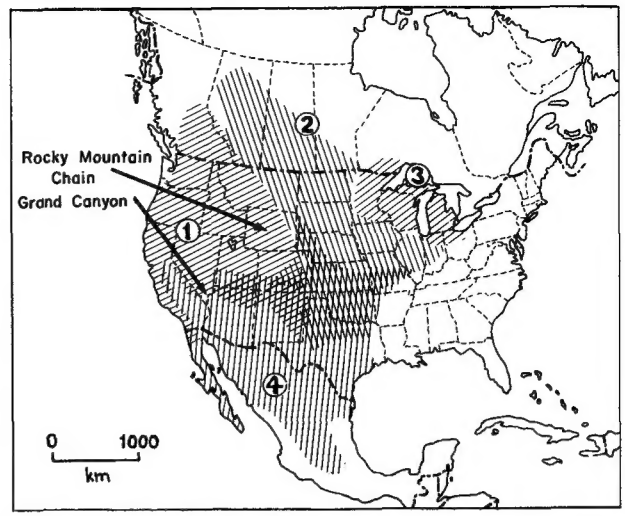

FIGURE 4. The distribution of *Taxidea taxus* in North America. Subspecies are: 1, *T. t. jeffersonii*; 2, *T. t. taxus*; 3, *T. t. jacksoni*; 4, *T. t. berlandieri*. Cross hatching shows areas of intergradation. The Rocky Mountains and the Grand Canyon seem important in the differentiation of the western subspecies.

DIAGNOSIS. The following diagnosis refers to both genus and species. Upper molar subtriangular, nearly right-angled with hypotenuse posterolateral; carnassial premolar also subtriangular with longest side posteromedial; skull wedge-shaped, broad posteriorly; auditory and mastoid bullae large; skull varying from 113 to 141 mm in length; frontals in juveniles escutcheon-shaped, fused in adults; body depressed and stout, legs short; feet subdigitigrade, with long curved foreclaws and shovel-like hind claws; toes of forefeet partially webbed; nictitating membrane can cover eye; pelage shaggy, grayish or brownish with white medial stripe on head, extending to base of tail in *berlandieri*; feet black or brown; "badges" of black on face surrounded by white; eight mammae; penis large, bearing scalloped projection distally; baculum hooked and twisted; adult dentition i 3/3, c 1/1, p 3/3, m 1/2, total 34; deciduous dentition di 1 or 2/0, dc 1/1, dp 3/3, total 18 or 20. Weights in large northern badgers up to 26½ pounds (12 kg) in males, which are larger than females. After Coues (1877) and Long (1965*b*, 1969, and 1972). See figure 1 for external view of *Taxidea taxus* and figure 2 for cranial details; dorsal views of the skulls of four Recent subspecies are shown in figure 3.

GENERAL CHARACTERS. Total length is about 600 to 730, length of tail vertebrae is 105 to 135, and length of hind foot ranges from 95 to 128. Other descriptions may be found in Audubon and Bachman, 1847; Baird, 1858; Coues, 1877; Mearns, 1891, Pocock, 1920, 1925; and Seton, 1929, which include photographs, measurements, and drawings. Long and Long (1965) described dental variations; and Long (1965*b*) the juvenile skull and the relationship with *Meles*.

DISTRIBUTION. The geographic range of the four Recent subspecies listed above is mapped in figure 4. Fossil occurrences in Alaska (Péwé, 1957), Maryland and New York (Gidley and Gazin, 1933), and Kentucky (Guilday, 1968), reveal profound distributional shifts in the Pleistocene. The altitudinal range is below sea level (Death Valley) to about 3660 m (12,000 feet). Ordinarily found in the treeless habitats of Transition and Upper Sonoran life-zones, the badger is known from Arctic-alpine down to the lower Austral Life-zone. Presently the badger is expanding its range eastward (Lyon, 1932; Snyder, 1935; Leedy, 1947; and Nugent and Choate, 1970).

FOSSIL RECORD. *Taxidea* has been reported from the late Pliocene (Bjork, 1970; Hibbard, 1941; Drescher, 1939); most workers regard assignment of these remains to *T. taxus* as questionable, and others regard some of the deposits as possibly Pleistocene. Some Pleistocene records have been mentioned above and by Long (1972). *Pliotaxidea* Butterworth is probably close to the ancestral line of Recent badgers (Hall, 1944).

FORM. Hall (1927) described the musculature in *Taxidea*. Long and Frank (1968) discussed the form and variation of the baculum, and Long (1969) discussed the gross anatomy of the penis. Pocock (1920, 1925) and Long (1965*b*) described cranial form in *Taxidea taxus*, and Long (1965*a*) discussed jaw articulation and tooth wear. Wright (1966, 1969)

described the form and tissues of the internal reproductive organs and accessory glands.

FUNCTION. Hardly anything is known about the physiology of *Taxidea*. At high elevations and latitudes badgers are torpid in winter, but probably are not true hibernators (Audubon and Bachman, 1847:366; Hamilton, 1939:134). They emerge on days of thaw (Seton, 1929; B. Bailey, 1929).

ONTOGENY AND REPRODUCTION. After mating in summer and early autumn (Davis and Robertson, 1944:264, Wright, 1966, 1969) impregnation occurs in females older than 1 year, and occasionally in juvenile (4 to 5 months) females (see also Hall, 1946:222). Usually three follicles ovulate (Wright, 1966). Implantation is delayed, development arrested in the blastula stage until between December and February (Hamlett, 1932:285–6) in Kansas, and until February in western Montana and South Dakota. Spermatogenesis lasts from May through August, and yearling males do not breed. Young are born in March and early April, furred and blind. Lactation occurs through June, and there is no post-partum estrus or further ovulation. Schwartz and Schwartz (1959:294) listed a maximum of seven embryos, but this record needs verification. Wright (1969) discussed the use of bacular length and annuli of lower canines and jaw in determining age. The badger lives in captivity to about 11 years, one living 13 years, 10 months, and 14 days (Flower, 1931:177). Jackson (1961:367) mentioned a life span of 15 years and 5 months. The changes with age in the skull are profound (Shufeldt, 1922). Self-sharpening and bracing of worn canines were discussed in relation to the hinge-locking mechanism of the jaw articulation by Long (1965*a*). Long (unpublished) has in manuscript remarks on the ontogeny of the skull, molting, and growth.

ECOLOGY. Badger parasites include a variety of nematodes (Ortlett, 1922:1107; Herman and Goss, 1940; Kalkan and Hansen, 1966; Keppner, 1969*a*; Tiner, 1953; Leiby *et al.*, 1971; Worley, 1961), tapeworms (Rausch, 1947; Keppner, 1967, 1969*b*; Leiby *et al.*, 1971), flukes (Swanson and Erickson, 1946; Leiby *et al.*, 1971), mallophaga (Emerson, 1964: 163), fleas (Fox, 1940:45; Ellis, 1955; and Hubbard, 1947: 502) and ticks (Hubbard, 1947; Ellis, 1955; Gregson, 1956). Jackson stated that badgers are susceptible to rabies and tularemia. Some predation occurs on badgers by coyotes (Seton, 1929) and golden eagles (G. B. Grinnell, 1929). Today a great deal of mortality is caused by automobiles, guns, poisons, and traps. Density, vaguely estimated, has been reported as one badger per 2.6 square kilometers (square mile) and 10 dens per square mile (Seton, 1929). V. Bailey (1905) mentioned a badger spending a summer in a 20-acre (0.8 km^2) field. Radio tracking has been attempted but few results are available. Sargeant and Warner (1972) reported data from radio-locations of a single female badger from summer into winter. "Overall home range" was determined as 850 hectares, and home range varied from 725 hectares in summer, to 53 in autumn, and to only 2 in winter. Usually the female dug a new den each day in summer, but reused dens considerably in autumn, and thereafter maintained a single den at least until 9 January. Burrows are used for dens, escape, and predation. Snead and Hendrickson (1942:389) described badger burrows. Foods are varied and include many small vertebrates, especially rodents (Errington, 1937; Snead and Hendrickson, 1942; Hamilton, 1939). Even fish, snakes, insects, honey combs, bees, and larvae, and bank swallow broods are eaten (Drake and Presnall, 1950; Jackson, 1961:368; Grinnell *et al.*, 1937; Potter, 1924).

BEHAVIOR. The badger is reportedly active both day and night, and is exceedingly fossorial (Audubon and Bachman, 1847:365; Seton, 1929; Perry, 1939). It presents a ferocious appearance to enemies, emitting aggressive sounds described by Seton. Other "purring" sounds were described by Perry. The anal glands may be used in defense (Grinnell, *et al.*, 1937). Males are solitary, except in the mating season, and females are usually so except when mating or rearing young. Davis (1946:175) suggested that the badger is not monogamous. Badgers may team with coyotes to catch rodents (Seton, 1929; Cahalane, 1950). The badger is a good swimmer (Seton, 1929; Wood, 1921). Reportedly the badger buries its dung (Walker *et al.*, 1964), although scats are often figured, presumably not buried. Play of the young and of captive badgers has been described by Seton, 1929; Audubon and Bachman, 1847:364; Perry, 1939; and Fry, 1928. Predation by one badger on ground squirrels was accomplished by lurking within a burrow (Balph, 1961).

REMARKS. Nothing is known about genetics of *Taxidea*. *Meles alba* Brisson (1762), type locality "Eboraco novo," known as "le Blaireau Blanc" was an albino raccoon according to Desmarest as reported by Richardson (1829:38). "Badgering" and "badger-baiting" with dogs was done chiefly with the old world badger *Meles*, but also with *Taxidea* according to Coues, 1877:283. The badger is exceptionally valuable to man as a predator on injurious rodents.

LITERATURE CITED

Audubon, J. J. and J. Bachman. 1847. The viviparous quadrupeds of North America. Wiley and Putnam, London, Vol. 1, xiv + 383 pp.

Bailey, B. 1929. Mammals of Sherburne County, Minnesota. Jour. Mammal. 10:153–164.

Bailey, V. 1905. Biological survey of Texas. N. Amer. Fauna 25:1–222.

Baird, S. F. 1858. Mammals, *in* Reports of explorations and surveys . . . from the Mississippi River to the Pacific Ocean . . . , 8(1):xlviii + 757 pp.

Balph, D. F. 1961. Underground concealment as a method of predation. Jour. Mammal., 42:423–424.

Bjork, P. R. 1970. The Carnivora of the Hagerman Local fauna (late Pliocene) of southwestern Idaho. Trans. Amer. Philos. Soc., n. s., 60(7):1–54.

Boddaert, P. 1784. Elenchus animalium. Roterodami, vol. 1, 174 pp.

Brisson, A. D. 1762. Regnum animale. . . . Luyduni Batavorum, T. Haak, 294 pp.

Buffon, G. L. C. 1776. Histore naturelle. Suppl., Tome 3, 330 + xxi pp.

Cahalane, V. H. 1950. Badger coyote "partnerships." Jour. Mammal. 31:354–355.

Cope, E. D. 1878. Proc. Amer. Philos. Soc., 17:227, original reference not seen.

Coues, E. 1877. Fur-bearing animals. . . . Dept. Interior Misc. Publ. (Washington) 8:xiv + 348.

Davis, W. B. 1946. Further notes on badgers. Jour. Mammal. 27:175.

Davis, W. B., and J. L. Robertson, Jr. 1944. The mammals of Culberson County, Texas. Jour. Mammal. 25:254–273.

Drake, G. E., and C. C. Presnall. 1950. A badger preying upon carp. Jour. Mammal. 31:355–356.

Drescher, A. B. 1939. A new Pliocene badger from Mexico. Bull. Southern California Acad. Sci. 38:57–62.

Ellis, L. L., Jr. 1955. A study on the ectoparasites of certain mammals in Oklahoma. Ecology 36:12–18.

Emerson, K. C. 1964. Checklist of the Mallophaga of North America. Part I, Suborder Ischnocera. Dugway, Utah, Proving Ground, 171 pp.

Errington, P. L. 1937. Summer food habits of the badger in northwestern Iowa. Jour. Mammal. 18:213–216.

Figgins, J. D. 1918. Description of a new subspecific form of Taxidea taxus from Colorado. Proc. Colorado Mus. Nat. Hist. 2:1.

Flower, S. S. 1931. Contributions to our knowledge of the duration of life in vertebrate animals. V. Mammals. Proc. Zool. Soc. London pp. 145–234.

Fox, I. 1940. Fleas of eastern United States. Iowa State College Press, Ames, vii + 191 p.

Fry, W. 1928. The California badger. California Fish and Game 14:204–208.

Gidley, J. W., and C. L. Gazin. 1933. New mammalia in the Pleistocene fauna from Cumberland Cave. Jour. Mammal. 14:343–357.

Gmelin, J. F. 1788. Caroli a Linné. . . . Syst. Nat., 13th ed., vol. 1, 500 pp.

Goldman, E. A. 1939. A new badger from Sonora. Jour. Washington Acad. Sci. 29:300–301.

Gray, J. E. 1865. Revision of the genera and species of Mustelidae contained in the British Museum. Proc. Zool. Soc. London pp. 100–154.

Gregson, J. D. 1956. The Ixodoidea of Canada. Canada Dept. Agric., no. 930. 92 pp.

Grinnell, G. B. 1929. Eagles' prey. Jour. Mammal. 10:83.

Grinnell, J., J. S. Dixon, and J. M. Linsdale. 1937. Fur-bearing mammals of California.... Univ. California Press, Berkeley, 1:xii + 1–375.

Guilday, J. E. 1968. Grizzly bears from eastern North America. Amer. Midland Nat. 79:247–250.

Hall, E. R. 1927. The muscular anatomy of the American badger (*Taxidea taxus*). Univ. California Publ. Zool. 30: 205–219.

— 1944. A new genus of American Pliocene badger, with remarks on the relationships of badgers of the Northern Hemisphere. Publ. Carnegie Inst. Washington 551:9–23.
— 1946. Mammals of Nevada. Univ. California Press, Berkeley, xi + 710 pp.
Hamilton, W. J., Jr. 1939. American mammals.... McGraw-Hill, New York, xii + 434 pp.
Hamlett, G. W. D. 1932. Observations on the embryology of the badger. Anat. Rec. 53:283–303.
Harlan, R. 1825. Fauna Americana: being a description of the mammiferous animals inhabiting North America. Finley, Philadelphia, 318 pp.
Hay, O. P. 1921. Descriptions of species of Pleistocene Vertebrata. . . . Proc. U. S. Nat. Mus. 59:599–642.
Herman, C. M., and L. J. Goss. 1940. Trichinosis in an American badger, *Taxidea taxus taxus*. Jour. Parasitol. 26:157.
Hibbard, C. W. 1941. Mammals of the Rexroad Fauna from the upper Pliocene of southwestern Kansas. Trans. Kansas Acad. Sci. 44:265–313.
Hubbard, C. A. 1947. Fleas of western North America. Iowa State College Press, Ames, ix + 533 pp.
Jackson, H. H. T. 1961. Mammals of Wisconsin. Univ. Wisconsin Press, Madison, 504 pp.
Kalkan, A., and M. F. Hansen. 1966. *Ancylostoma taxideae* sp. n. from the American badger, *Taxidea taxus taxus*. Jour. Parasitol. 52:291–294.
Keppner, E. J. 1967. *Fossor taxidiensis* (Skinker, 1935) n. comb. with a note on the genus *Fossor* Honess, 1937 (Cestoda: Taeniidae). Trans. Amer. Microsc. Soc. 86:157–158.
— 1969*a*. *Filaria taxideae* n. sp. (Filarioidea: Filariidae) from the badger, *Taxidea taxus taxus* from Wyoming. Trans. Amer. Microsc. Soc. 88:581–588.
— 1969*b*. Occurrence of *Ariotaenia procyonis* and *Molineus mustelae* in the badger, *Taxidea taxus* (Schreber, 1778), in Wyoming. Jour. Parasitol. 55: 1161.
Leedy, D. L. 1947. Spermophiles and badgers move eastward in Ohio. Jour. Mammal. 28:290–292.
Leiby, P. D., P. J. Sitzmann, and D. C. Kritsky. 1971. Studies on helminths of North Dakota. II. Parasites of the badger, *Taxidea taxus* (Schreber). Proc. Helminthol. Soc. Washington 38:225–228.
Long, C. A. 1964*a*. Taxonomic status of the Pleistocene badger, *Taxidea marylandica*. Amer. Midland Nat. 72: 176–180.
— 1964*b*. *Meles montanus* Richardson, 1829, and *Meles jeffersonii* Harlan, 1825: Proposed suppression under the plenary powers (Mammalia, Carnivora). Bull. Zool. Nomen. 21:370–371.
— 1965*a*. Functional aspects of the jaw-articulation in the North American badger, with comments on adaptiveness of tooth-wear. Trans. Kansas Acad. Sci. 68:156–162.
— 1965*b*. Comparison of juvenile skulls of the mustelid genera Taxidea and Meles, with comments on the taxon Taxidiinae Pocock. Amer. Midland Nat. 74:225–232.
— 1969. Gross morphology of the penis in seven species of the Mustelidae, Mammalia 33:145–160.
— 1972. Taxonomic revision of the North American badger, *Taxidea taxus*. Jour. Mammal. 53:725–759.
Long, C. A., and T. Frank. 1968. Morphometric variation and function in the baculum, with comments on correlation of parts. Jour. Mammal. 49:32–43.
Long, C. A., and C. F. Long. 1965. Dental abnormalities in North American badgers, genus *Taxidea*. Trans. Kansas Acad. Sci. 68:145–155.
Lyon, M. W., Jr. 1932. The badger Taxidea taxus (Schreber) in Indiana. Amer. Midland Nat. 13:124–129.
Mearns, E. A. 1891. Observations on the North American badgers, with especial references to the forms found in Arizona, with descriptions of a new subspecies from northern California. Bull. Amer. Mus. Nat. Hist. 3:239–251.
Nugent, R. F., and J. R. Choate. 1970. Eastward dispersal of the badger, *Taxidea taxus*, into the northeastern United States. Jour. Mammal. 51:626–627.
Ortlett, R. J. 1922. The nematode genus Physaloptera Rud. Proc. Zool. Soc. London pp. 999–1107.
Perry, M. L. 1939. Notes on a captive badger. Murrelet 20: 49–53.
Péwé, T. L. 1957. Permafrost and its effect on life in the North. 18th Biol. Colloquium, Oregon State College Publ., pp. 12–25.
Pocock, R. I. 1920. On the external and cranial characters of the European badger (*Meles*) and of the American badger (*Taxidea*). Proc. Zool. Soc. London 1920:423–436.
— 1925. The external characters of an American badger (*Taxidea taxus*) and on American mink (Mustela vison). . . . Proc. Zool. Soc. London 1925:17–25.
Potter, L. B. 1924. Badger digs for bank swallows. Condor 26:191.
Rausch, R. 1947. A redescription of *Taenia taxidiensis* Skinker, 1935. Proc. Helminthol. Soc. Washington 14:73–75.
Richardson, J. 1829. Fauna Boreali-Americana. John Murray, London, lvi + 300 pp.
Sargeant, A. B., and D. W. Warner. 1972. Movements and denning habits of a badger. Jour. Mammal. 53:207–210.
Say, T. 1823. *In* E. James, Account of an expedition from Pittsburgh to the Rocky Mountains. . . . Carey and Lea, Philadelphia, vol. 1, 503 pp.
Schantz, V. S. 1945. A new badger from Wisconsin. Jour. Mammal. 26:431.
— 1946. A new badger from South Dakota. Proc. Biol. Soc. Washington 59:81–82.
— 1947. A new subspecies of badger from the state of Iowa. Jour. Mammal., 28:287–288.
— 1948. A new badger from Mexico-United States boundary. Proc. Biol. Soc. Washington 61:175–176.
— 1949. Three new races of badgers (*Taxidea*) from southwestern United States. Jour. Mammal. 30:301–305.
— 1950*a*. A new badger from Montana. Jour. Mammal. 31: 90–92.
— 1950*b*. A new race of badger (*Taxidea*) from Kansas. Jour. Washington Acad. Sci. 40:92–93.
— 1950*c*. A new race of badger (Taxidea) from eastern Kansas. Jour. Mammal. 31:346–347.
— 1951. A substitute name for *Taxidea taxus nevadensis* Schantz. Jour. Mammal. 32:126–127.
Schreber, J. C. 1778. Die Säugthiere. . . . Leipzig, vol. 3, p. 520–589, pl. 142, original not seen.
Schwartz, C. W., and E. R. Schwartz. 1959. The wild mammals of Missouri. Univ. Missouri Press and Missouri Conserv. Comm., Columbia, xvi + 341 pp.
Seton, E. T. 1929. Lives of game animals. . . . Boston, Chas. Branford Co., vol. 4, 949 pp. (reissued 1953.)
Shufeldt, R. W. 1922. Remarkable changes in the skull of an American badger (Taxidea taxus) due to advanced age. Jour. Mammal. 3:173–175.
Skinner, M. F. 1943. The fauna of Papago Springs Cave, Arizona, and a study of Stockeroceros. Bull. Amer. Mus. Nat. Hist. 80:143–220.
Snead, E., and G. O. Hendrickson. 1942. Food habits of the badger in Iowa. Jour. Mammal., 23:380–391.
Snyder, L. L. 1935. A badger specimen from Port Dover, Norfolk County, Ontario. Canadian Field-Nat. 49:136–137.
Swanson, G., and A. B. Erickson. 1946. *Alaria taxideae* n. sp., from the badger and other mustelids. Jour. Parasitol. 33:17–19.
Thomas, O. 1898. [Description of a new badger.] Proc. Zool. Soc. London p. 899 (for 1897).
Tiner, J. D. 1953. Fatalities in rodents caused by larval *Ascaris* in the central nervous system. Jour. Mammal. 34:153–167.
Walker, E. P., *et al.* 1964. Mammals of the World. Johns Hopkins Press, Baltimore. 3 vols.
Waterhouse, G. R. 1838. [On the skull of the American badger.] Proc. Zool. Soc. London pp. 153–154.
Wood, N. A. 1921. The badger as a swimmer. Jour. Mammal. 2:170.
Worley, D. E. 1961. The occurrence of *Filaria martis* Gmelin, 1790, in the striped skunk and badger in Kansas. Jour. Parasitol. 47:9–11.
Wright, P. L. 1966. Observations on the reproductive cycles of the American badger (*Taxidea taxus*). Symp. Zool Soc. London 15:27–45.
— 1969. The reproductive cycle of the male American badger, *Taxidea taxus*. Jour. Reprod. Fert., Suppl. 6:435–445.

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